Appl. No. 09/927,712
Amdt. sent December 28, 2004
Amendment

PATENT

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1 - 16. (Canceled)

1   17.   (New) A computer system comprising:

2   a first server operative to receive I/O requests from a requesting computer;

3   a second server operative to receive I/O requests from said requesting computer;

4   a managing computer in data communication with said first and second servers;

5   a first storage unit; and

6   a second storage unit,

7   said first storage unit being accessible by said first server but not by said second

8   server;

9   said managing computer operative to obtain data access load conditions from said

10   first and second servers,

11   based on said data access load conditions said managing computer operative to:

12   select said second storage unit;

13   move a first data partition stored in said first storage unit to said second

14   storage unit;

15   cause said second server to access said second storage unit; and

16   transmit information to said requesting computer that said first data is to

17   be accessed via said second server.

1   18.   (New) The system of claim 17 wherein said first data partition is copied

2   from said first storage unit to said second storage unit and, subsequent to said first data partition

3   being copied to said second storage unit, said first data partition is deleted from said first storage

4   unit, thereby effecting a move of said first data partition to said second storage unit.

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1   19. (New) The system of claim 17 wherein said requesting computer is a

2 front-end server that receives requests from client machines, said first server and second server

3 each being a back-end server which receives requests from said front-end server.

1   20. (New) The system of claim 17 further comprising a storage system, said

2 storage system comprising said first storage unit and said second storage unit, wherein a

3 communication port in said second server can be configured for data communication with a

4 communication port in said storage system for data access to said second storage unit.

1   21. (New) The system of claim 17, further comprising a first storage system

2 comprising said first storage unit and a second storage system comprising said second storage

3 unit.

1   22. (New) The system of claim 17 wherein moving said first data partition

2 from said first storage unit to said second storage unit includes copying it from said first storage

3 unit to said second storage unit, and subsequent to being copied to said second storage unit said

4 first data partition is deleted from said first storage unit,

5   wherein additional data partitions in said first storage unit can be similarly moved

6 to additional storage units, said additional storage units being accessed by additional servers, said

7 requesting computer being informed of said additional servers.

1   23. (New) The system of claim 22 wherein a communication port in said

2 second server can be configured for data communication with a communication ports in said

3 storage system for data access to said second storage unit.

1   24. (New) The system of claim 17 further comprising a switch operative for

2 data communication among devices connected to said switch, said first server and said second

3 server being connected to said switch, said storage system being connected to said switch so that

4 said first and second servers can access data stored in said first and second storage units, said

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5   switch further being operative to direct data requests from one of said first and second servers to

6   one of said first and second storage units.

1   25.   (New) The system of claim 17 wherein said management computer

2   includes a display unit operable to present a first display area and a second display area,

3   said first display area to display one or more first symbols that represent said first

4   server, said second server, or said first storage unit, and having second symbols that represent

5   communication paths,

6   said second display area having third symbols that represent said second storage

7   unit,

8   wherein said management computer selects the second storage unit in accordance

9   with receiving an indication for moving one of said third symbols from said second display area

10   into said first display area.

1   26.   (New) A computer system comprising:

2   a first server operative to receive I/O requests from a requesting computer;

3   a managing computer in data communication with said first server; and

4   a first storage system comprising a plurality of storage units;

5   a second storage system comprising a plurality of storage units,

6   said first server in data communication with a first storage unit in said first storage

7   system,

8   said managing computer operative to obtain loading information relating to data

9   access load conditions of said first server,

10   based on said data access load conditions said managing computer operative to:

11   select a second storage unit from either said first storage system or said

12   second storage system;

13   perform a move operation of a first data partition stored in said first

14   storage unit to said second storage unit; and

15   perform a first configuration operation wherein said first server can access

16   said first storage unit and said second storage unit,

17   wherein said first data partition is accessed via said second storage unit.

1   27.   (New) The system of claim 26 wherein said first data partition is copied

2   from said first storage unit to said second storage unit and, subsequent to said first data partition

3   being copied to said second storage unit, said first data partition is deleted from said first storage

4   unit, thereby effecting said move operation of said first data partition.

1   28.   (New) The system of claim 26 wherein managing computer is further

2   operative to perform a second configuration operation wherein a second server accesses said

3   second storage unit, if said first configuration operation cannot be performed.

1   29.   (New) The system of claim 28 wherein said requesting computer is a

2   front-end server that receives requests from client machines, said first server and second server

3   each being a back-end server which receives requests from said front-end server.

1   30.   (New) The system of claim 26 wherein data in said first storage unit is

2   partitioned into a plurality of data partitions, said first data partition being one of said data

3   partitions, wherein said managing computer is further operative to move additional data

4   partitions from among said data partitions to additional storage units based on data access load

5   conditions obtained from said first server.

1   31.   (New) The system of claim 26 further comprising a switching device,

2   said first server in data communication with said switching device, said managing computer

3   further being operative to obtain loading information from said first server or said switching

4   device.

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1   32. (New) The system of claim 26 wherein said management computer

2 includes a display unit operable to present a first display area and a second display area,

3   said first display area to display one or more first elements representative of said

4 first server, or said first storage unit, and second elements representative of communication paths

5 among said first elements,

6   said second display area to display one or more third elements representative of

7 said second storage unit,

8   wherein said management computer performs said first configuration operation in

9 accordance with receiving an indication for moving one of said third elements from said second

10 display area into said first display area.